To: Mogharabi, Nahal[MOGHARABI.NAHAL@EPA.GOV]

Cc: Montgomery, Michael[Montgomery.Michael@epa.gov]; Johnson,

AudreyL[Johnson.AudreyL@epa.gov]

From: Albright, David

Sent: Fri 9/12/2014 5:54:08 AM
Subject: RE: Story on CA injection wells

Hi Nahal, I drafted responses for the reporter's questions that focused on injection wells. Draft responses are below. I'm off on Friday, but will monitor email.

Thanks, David

1. Does the EPA believe California failed to follow all aspects of the 1974 Safe Drinking Water Act? Does the EPA believe the state has followed all federal rules for injection wells? Why or why not?

Since 1983, CA Division of Oil, Gas and Geothermal Resources has been granted primary responsibility to implement the Safe Drinking Water Act Underground Injection Control (UIC) Program for oil and gas related injection wells. EPA requires the State to implement this program in accordance with approved statutes and regulations.

In our recent letter to the State regarding their approved UIC program, EPA noted that any injection from a Class II (oil and gas related) well into an aquifer that meets the definition of an underground source of drinking water, absent an EPA-approved exemption, is inconsistent with UIC regulations and State Program primacy requirements. EPA also noted that the State had identified some instances where it had authorized injection of oil and gas related disposal fluids, such as brines, into non-exempt aquifers that met the criteria of underground sources of drinking water. EPA's ongoing program evaluation is intended to ensure that all instances of injection into non-exempt aquifers are identified and remedied by the State.

2. When is the EPA investigation into CA's injection wells expected to be completed?

EPA expects that the evaluation of California's Class II UIC program will be ongoing over the next several months, but there is no specific deadline for completing the review.

12. How often have oil companies failed to follow regulations regarding injection wells? How many times have the wells failed?

There are approximately 50,000 oil and gas related injection wells in the State. The frequency of non-compliance with injection well requirements is relatively low, and the type of non-compliance can range from failure to conduct routine monitoring/reporting to unauthorized injection. Well failures (wells that lose mechanical integrity) can create the potential for fluid movement outside the intended injection zone and are considered significant non-compliance if not promptly addressed. Specific numbers of program violations and individual well failures would best be obtained from the State.

From: Mogharabi, Nahal

Sent: Thursday, September 11, 2014 4:16 PM

To: Albright, David

Cc: Montgomery, Michael; Johnson, AudreyL **Subject:** Re: Story on CA injection wells

Hi David,

Apologies for the delay, I'm having computer issues. If you could get me draft responses tomorrow morning that would be great.

Many thanks!

Nahal

On Sep 11, 2014, at 1:32 PM, "Albright, David" < <u>Albright.David@epa.gov</u>> wrote:

Hi Nahal, we have not received additional information from DOGGR since their Aug 18 submittal.

Regarding sumps, these are not specifically regulated by EPA, as injection wells

are. However, if sumps discharged to a surface water body or contaminated GW in a manner that threatened a PWS we would have authority. Not sure if they may also be covered by SPCC requirements.

There are 3 questions dealing with injection wells. I am out of the office this afternoon but could try to draft a quick response by tomorrow morning if that is helpful.

Sent from my BlackBerry 10 smartphone on the Verizon Wireless 4G LTE network.

From: Mogharabi, Nahal

Sent: Thursday, September 11, 2014 1:07 PM

To: Montgomery, Michael; Albright, David; Johnson, AudreyL

Subject: Fwd: Story on CA injection wells

Please see the below, specific questions that the reporter has. Many are her questions are related to sumps.

Also, have we received any additional information from DOGGR?

Nahal

Begin forwarded message:

From: Hannah Guzik < hannahguzik@gmail.com > Date: September 11, 2014 at 12:59:39 PM PDT

To: "Mogharabi, Nahal" < MOGHARABI.NAHAL@epa.gov>

Subject: Re: Story on CA injection wells

Hi Nahal,

Thanks for the response. My deadline is noon tomorrow (Friday).
Here are some questions:
1. Does the EPA believe California failed to follow all aspects of the 1974 Safe Drinking Water Act? Does the EPA believe the state has followed all federal rules for injection wells? Why or why not?
2. When is the EPA investigation into CA's injection wells expected to be completed?
3. I have heard that in addition to waste injection wells, there are things called waste sumps, which are unlined pits that oil companies sometimes use to hold drilling mud and other waste from drilling. Can you tell me more about these sumps? Can you describe their size and features?
4. Where have these sumps been located in CA and other states? Has the EPA tracked these sumps?
5. Are there any regulations concerning them? If so, what are they?
6. Is the EPA investigating these sumps as part of it's investigation into CA's injection wells, or does the investigation not concern the sumps?
7. Is the EPA concerned that these sumps may have polluted groundwater or soil? How about air pollution?
8. I've been told that a company in Kern County, called Vintage Petroleum, was caught putting fracking waste in one of these sumps. Has this occurred? How often and where?
9. Environmental justice groups say they're concerned that these sumps, as well as injection

wells, seem to be disproportionately located near low-income communities and/or communities of color. Is this accurate? Has the EPA tracked this?
10. Can you tell me about the history of sumps in CA and nationwide? When was the first one created and where? How many have been constructed since then?
11. How often have oil companies fail to follow regulations regarding sumps (by illegally dumping other substances, etc)?
12. How often have oil companies failed to follow regulations regarding injection wells? How many times have the wells failed?
Thanks!